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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,599	10/19/2001	Stephen J. Sicola	P01-3685	1960

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EXAMINER

PATEL, NIMESH G

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/086,599

Applicant(s)

SICOLA ET AL.

Examiner

Nimesh G Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-37 is/are allowed.
- 6) ☒ Claim(s) 1,2,5-11 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 3,4,12-16 and 20-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 5-6, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Sicola et al.('776), hereinafter referred to as Sicola.

3. Regarding claim 1, Sicola discloses a first controller(Figure 3A, Controller A) for positioning on a shelf of a data storage cabinet in a mass storage system having a plurality of reporting groups(Figure 2, Cabinets 0, 1, and 2; Column 4, Lines 40-44; The EMU in each cabinet reports monitoring information for its respective cabinet), comprising: an interface to a data communication loop(Figure 3A, 60) for a reporting group, said loop linked to device enclosures each including a plurality of data devices and an enclosure processor(Figure 3A, 62, 63, 64, 65) wherein the interface is adapted for transmitting control commands onto the data communication loop(Column 5, Lines 2-3); a cabinet bus interface controller linked to a cabinet bus(Figure 3A, 68, It is inherent a there is an interface controller to communicate on the cabinet bus 68) in the data storage cabinet and adapted to receive enclosure reporting messages from the device enclosures including environmental information for the device enclosures and to transmit subenclosure message including environmental information for the first controller(Column 5, Lines 33-45); and a processor for creating the control commands and the subenclosure messages(Column 5, Lines 2-3).

4. Regarding claim 2, Sicola discloses a first controller, wherein the control commands are addressed to one of the device enclosures designated as a primary reporting device(Column 4, Lines 63-66).

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5. Regarding claim 5, Sicola discloses a first controller, wherein at least one of the device enclosures is positioned in a data storage cabinet differing from the data storage cabinet housing the first controller(Figure 2, Cabinet 1, 50) and wherein the two data storage cabinets are communicatively-linked with a cabinet communication network, the different data storage cabinet including a cabinet bus linked to the cabinet communication network(Figure 3B, Bus to EMU0) to provide a communication path for the enclosure reporting messages from at least one of the device enclosures(Figure 2; Column 5, Lines 33-35).

6. Regarding claim 6, Sicola discloses a first controller, wherein the cabinet bus interface controller is configured to receive cabinet identification and shelf identification signals from the cabinet bus and to determine a shelf identifier from the shelf identification signals, and wherein the subenclosure messages include the shelf identifier and the cabinet identification(Column 5, Lines 28-56).

7. Regarding claim 11, Sicola discloses a method of controlling communications in a data storage complex containing a plurality of reporting groups(Figure 2, Cabinets 0, 1, and 2; Column 4, Lines 40-44; The EMU in each cabinet reports monitoring information for its respective cabinet), comprising: providing a controller(Figure 3A, Controller A) including a processor for creating and transmitting control commands and a cabinet bus interface controller for providing an interface between the processor and other devices in one of the plurality of reporting groups within the storage complex; and communicatively linking the controller to a plurality of enclosures with a data communication loop and with a cabinet bus, wherein the control commands are transmitted over the data communication loop and wherein environmental status messages are received by the controller over the cabinet bus(Column 5, Lines 2-3; Column 4, Lines 40-43; Column 5, Lines 33-36).

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8. Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Martinez et al.(5,956,665), hereinafter referred to as Martinez.

9. Regarding claim 17, Martinez discloses a system for data communication management comprising: plurality of devices(Figure 1, 26) stored within a data storage cabinet, said devices grouped into a plurality of reporting groups(Column 5, Lines 20-23; each shelf is a reporting group), a data communication loop for transmitting control commands to and receiving control information from said plurality of devices within each reporting group(Column 6, Lines 32-37); and a host for controlling said devices via said data communication loop in response to said control information received from said devices(Column 6, Lines 8-13).

10. Regarding claim 18, Martinez discloses a system, further comprising: a controller coupled to said host and said data communication loop, wherein said controller controls said devices in response to commands received from said GUI host(Column 12, Lines 25-32).

11. Regarding claim 19, Martinez discloses a system, wherein the control commands are addressed to one of the plurality of devices designated as a primary reporting device(Column 9, Lines 61-66).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sicola, in view of Coffey et al.(US Pub 2002/0010883), hereinafter referred to as Coffey.

15. Regarding claim 7, Sicola does not specifically disclose a controller, wherein the enclosure reporting messages comprise SCSI-3 Enclosure (SES) data. However, Coffey discloses messages comprising SCSI-3 Enclosure (SES) data SES(Paragraph 34).

Therefore it would have been obvious to one of ordinary skill in the art to use SES data, as disclosed by Coffey, in the system of Sicola since this would comply with a standard that is commonly used in the industry.

16. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sicola, in view of Martinez.

17. Regarding claim 8, Sicola does not specifically disclose a controller, wherein the cabinet bus interface controller emulates a memory image to the processor including read only memory, non-volatile read and write memory, and read and write memory. However Martinez discloses emulating a memory including read only memory, non-volatile read and write memory, and read and write memory(Column 7, Lines 61-65).Therefore it would have been obvious to include emulation of memory, as disclosed by Martinez, in the system of Sicola, since this would allow cabinet and shelf information to be stored in memory.

18. Regarding claim 9, Martinez discloses the read only memory includes a shelf identifier field for storing a shelf identifier for the controller and a cabinet number field for storing a cabinet identifier for the data storage cabinet(Column 7, Lines 61-65).

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19. Regarding claim 10, Martinez discloses transmitting interrupt signals based on changes to the memory image(Column 7, Lines 61-65).

Allowable Subject Matter

20. Claims 3-4, 12-16, and 20-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

21. Claims 17-37 are allowed.

Response to Arguments

22. Applicant's arguments filed July 30, 04 have been fully considered but they are not persuasive. Applicant argues Sicola does not show plurality of reporting groups. However, as stated in the above rejection, Sicola discloses a plurality of reporting groups(Figure 2, Cabinets 0, 1, and 2; Column 4, Lines 40-44; The EMU in each cabinet reports monitoring information for its respective cabinet).

Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee

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pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action.

In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

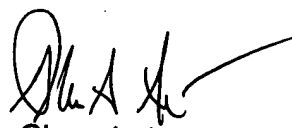
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nimesh G Patel whose telephone number is 571-272-3640. The examiner can normally be reached on M-F, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nimesh G Patel
Examiner
Art Unit 2112

NP Nf
November 1, 2004


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Primary Patent Examiner
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